### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization

International Bureau





#### (43) International Publication Date 11 August 2005 (11.08.2005)

PCT

# (10) International Publication Number WO 2005/073283 A1

(51) International Patent Classification<sup>7</sup>:

(21) International Application Number: PCT/US2005/002077

C08G 81/02

(22) International Filing Date: 21 January 2005 (21.01.2005)

(25) Filing Language:

60/609,291

English

(26) Publication Language:

English

(30) **Priority Data:** 60/538,355 22 January 2004 (2

22 January 2004 (22.01.2004) US 13 September 2004 (13.09.2004) US

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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FUNCTIONALIZED ELASTOMER COMPOSITIONS

(57) Abstract: The present invention relates to olefinic compositions comprising a functionalized branched olefin copolymer containing functionalized sidechains derived from olefin and at least one chain end nucleophilic heteroatom containing functional group with at least one protic hydrogen, optionally with one or more copolymerizable monomers, the copolymer characterized by having A) a  $T_g$  <-10°C as measured by DSC; B) a  $T_m$  > 100°C; C) an elongation at break of greater than or equal to 500 percent; D) a Tensile Strength of greater than or equal to 1,500 psi (10,300 kPa) at 25°C.; E) a TMA temperature>80°C, and F) an elastic recovery of greater than or equal to 50 percent.

